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March 10, 2008

Stephen L. Johnson
Administrator
US Environmental Protection Agency
P.O. Box 1473
Merrifield, VA 22116

Attn: Chemical Right-to-Know Program

Dear Administrator Johnson:

INVISTA S.à r.l. is pleased to submit responses to EPA's comments, along with final robust summaries and test plan documents, for the chemical Triisopropylborate (TIPB), CAS# 5419-55-6.

The revisions to the robust summaries provide, as available, the additional information on critical studies requested by EPA. This final version of the test plan takes into account EPA's comment that data for repeated-dose, developmental, and reproductive effects would not be needed if hydrolysis is sufficiently rapid in the stability in water test. INVISTA conducted an OECD 111 stability in water test and, as predicted, found that TIPB hydrolyzes completely to isopropanol and boric acid within 15 minutes across a broad pH range. As such, read-across data from isopropanol and boric acid have also been included in these revised documents. OECD, NTP, and ACGIH have also reviewed and summarized information on these two substances. Based on the data listed in the summaries, a literature search, and data from accepted models, adequate information is available for all endpoints and no further testing is proposed.

Listed below are INVISTA's responses to EPA's comments of April 19, 2004:

Physiochemical Data

EPA comment: The submitter needs to indicate whether the vapor pressure value provided is measured or estimated.

Response: The vapor pressure value was measured and this has been noted in the robust summary.

Environmental Fate (photodegradation, stability in water, biodegradation, fugacity)

EPA comment – Biodegradation: The submitter needs to add information on the inoculum used.

Response: More suitable read-across data have been added to address the missing/requested information. Additionally, an OECD 111 assay was performed to address the issue of stability in water.

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Ecotoxicity (fish, invertebrates, and algae)

EPA comment: Details missing from the submitted robust summary for acute fish toxicity of isopropanol including concentrations tested, purity of the test substance, mortality and effects per concentration, number of animals used per concentration, control response, and the loading rate of the fish.

Response: Where available, data have been added to address the missing/requested information.

EPA comment: Information missing from the submitted robust summaries for acute fish toxicity of boric acid including concentrations tested, use of control, mortality and effects per concentration, number of groups of animals per concentration, test substance purity, and water chemistry parameters.

Response: Where available, data have been added to address the missing/requested information.

EPA comment: Details missing from the submitted robust summaries for acute aquatic invertebrate toxicity of isopropanol including test substance purity, concentrations tested, test system type, number of animals tested per concentration, number of duplicate experiments, loading rate of the animals, use of a control, mortality and effects per concentration, and water chemistry parameters.

Response: Where available, data have been added to address the missing/requested information.

EPA comment: Details missing from the submitted robust summaries for acute aquatic invertebrate toxicity of boric acid including test substance purity, concentrations tested, number of duplicate tests, loading rate of the daphnids, age of daphnids, mortality and effects per concentration, and control response.

Response: Where available, data have been added to address the missing/requested information.

Health Effects

EPA comment: The submitted summary for the acute oral toxicity study in rats only reported the test substance as "pure," but did not provide a specific percentage for the constituents.

Response: Specific percentage for the constituents was not reported in the published source. This has been noted in the robust summary.

EPA comment: The submitted summary for the acute oral toxicity study in mice was missing study details such as concentrations tested, number of animals used per concentration, sex of animals used, mortality and effects per concentration, and statistical methodology.

Response: The information requested was not reported in the published source. This has been noted in the robust summary.

EPA comment: The submitted summary for the bacterial reverse mutation assay was missing information indicating whether a closed system was used. Other missing details include the specific purity of the test substance, the number of replicates per concentration, the number of revertant colonies per plate, positive and negative control response, and statistical methodology used.

Response: Where available, data have been added to address the missing/requested information.



EPA comment: EPA agrees that data are needed for repeated-dose, developmental, and reproductive effects. However, if hydrolysis is sufficiently rapid at the physiologically important pH of 1.2 in the stability in water test, then data on the breakdown products could be used to address these endpoints.

Response: TIPB was unstable in water in an OECD 111 assay, at various pH values, including the physiologically important pH of 1.2. Read-across data from the breakdown products, isopropanol and boric acid are provided in the summaries.

This submission includes one electronic copy in .pdf format. A hard copy can be provided upon request.

Please feel free to contact me with any questions you might have regarding this submission.

Sincerely,

Heather J. Blankinship
Product Safety Capability Manager
Environmental Health and Safety

Attachments